

simultaneously” in Independent Claims 1, 8, 15, 24, and 35 was considered vague and indefinite because it did not “clearly set forth the metes and bounds of the claimed invention”.

Applicant respectfully traverses the rejection of Claims 1-44. Applicant submits that the claimed invention as recited in Claims 1-44 are definite and particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. Section 112, second paragraph, of Claims 1-44.

The specification supports the use of the phrase “pseudo simultaneously”. In particular, the specification states at page 5, lines 10-25:

“The present invention provides a system wherein a broadcast source communicates broadcast information (e.g., encoded audio radio content, encoded audio/video television content, program instructions, etc.) to a first group of electronic devices. The first group of electronic devices can be instructed by a transmission scheduler to then communicate (e.g., forward) the broadcast information to other electronic devices, which devices can also be instructed to communicate to more devices, etc., **thereby reducing the bandwidth requirements of the communication channel** between the broadcast source and the first group of electronic devices. Typically, the communication channel between the broadcast source and the first group involves the connection between the Internet and the server.

Slight communication delays may be encountered by the transmission forwarding, but these delays can typically be tolerated in broadcast transmissions (e.g., radio content, television content, seminars, etc.) because they are not generally interactive.”(emphasis added)

This passage makes clear that the phrase “pseudo simultaneously” refers to the fact that although broadcast information may be received by electronic devices from a broadcast source or another electronic device (which

forwards the broadcast information) at different times because of different communication delays, the different communication delays are minimized so that each separate electronic device renders the broadcast information at apparently the same time even though the bandwidth requirements of the broadcast source are reduced. In the prior art, a broadcast transmission was achieved by establishing separate communication channels between the broadcast source and each electronic device. In sum, Claims 1-44 do clearly set forth the metes and bounds of the claimed invention.

35 U.S.C. Section 102(e) Rejections

In the above referenced Office Action, Claims 1, 6-9, 13-15, 21-26, 32-36, and 42-44 are rejected under 35 U.S.C. Section 102(e) as being anticipated by Fujita, U.S. Pat. No. 5,948,070 (hereafter Fujita). Applicant respectfully traverses the rejection of Claims 1, 6-9, 13-15, 21-26, 32-36, and 42-44.

INDEPENDENT CLAIM 1

Claim 1:

A method of communicating broadcast information comprising the steps of:

- a) causing a server to communicate **a first stream representing digital broadcast information** to a first user device wherein said server and said first user device are coupled to the Internet;
- b) causing said server to communicate **a second stream representing said broadcast information** to a second user device wherein said second user device is coupled to the Internet;
- c) causing said first user device to communicate **a third stream representing said broadcast information** to a third user device wherein said third user device is coupled to the Internet; and
- d) rendering, pseudo simultaneously, said broadcast information on said first, second, and third user devices. (emphasis added)

Fujita discloses a file transfer method and system. The file transfer system includes a file-sending communication processing system, relaying communication processing systems, and file-receiving communication processing systems. (Fujita, Col. 6, Lines 10-20). According to Fujita, a file is transmitted by the file-sending communication processing system to the appropriate relaying communication processing systems. (Fujita, Col. 8, Line 59 - Col. 11, Line 33). Each appropriate relaying communication processing system receives the file and stores the file in its file storage device. (Id.) Then, each appropriate relaying communication processing system transmits the file to other appropriate relaying communication processing systems or to appropriate file-receiving communication processing systems. (Id.).

Applicant respectfully submits that Independent Claim 1 is not anticipated by Fujita. Fujita discloses the method and system of transferring files from a file source to a plurality of receiving devices via a plurality of relay devices. In particular, the entire file is transferred between a file source and a plurality of relay devices. Moreover, the entire file is transferred between a relay device and another relay device (or secondary relay device) or a receiving device. Unlike Fujita, Independent Claim 1 is directed to a method of communicating broadcast information having the steps of causing a server to communicate a first stream representing broadcast information to a first user device, causing the server to communicate a second stream representing the broadcast information to a second user device, causing the first user device to communicate a third stream representing the broadcast information to a third user device, and rendering, pseudo simultaneously, the broadcast information on the first,

second, and third user devices. Thus, each user device receives, pseudo simultaneously, each portion of the stream of digital broadcast information transmitted by the server.

Fujita does not disclose communicating between devices streams of data representing digital broadcast information. Moreover, in Fujita, the relay devices receive the entire file before the secondary relay devices and the receiving devices receive any portion of the file. In sum, Independent Claim 1 is not anticipated by Fujita and is in a condition for allowance.

Dependent Claims 6-7 are dependent on allowable Independent Claim 1, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 6-7 are patentable over Fujita for the reasons discussed above.

INDEPENDENT CLAIM 8

Claim 8 recites:

A method of broadcasting information over a network of electronic devices, said method comprising the steps of:
transmitting broadcast information from a server to a first group of electronic devices of said network; and
achieving pseudo-simultaneous broadcasting of said broadcast information for said first group and a second group of electronic devices by forwarding said broadcast information from said first group of electronic devices to said second group of electronic devices of said network.

Applicant respectfully submits that Independent Claim 8 is not anticipated by Fujita. Fujita discloses the method and system of transferring files from a file source to a plurality of receiving devices via a plurality of relay devices. In

particular, the entire file is transferred between a file source and a plurality of relay devices. Moreover, the entire file is transferred between a relay device and another relay device (or secondary relay device) or a receiving device. Unlike Fujita, Independent Claim 8 is directed to a method of communicating broadcast information over a network of electronic devices, the method having the steps of transmitting broadcast information from a server to a first group of electronic devices, and achieving pseudo-simultaneous broadcasting of the broadcast information by forwarding information from the first group of electronic devices to a second group of electronic devices. Thus, each user device receives, pseudo simultaneously, each portion of the broadcast information transmitted by the server.

Fujita does not disclose communicating between devices streams of data representing digital broadcast information. Moreover, in Fujita, the relay devices receive the entire file before the secondary relay devices and the receiving devices receive any portion of the file. In sum, Independent Claim 8 is not anticipated by Fujita and is in a condition for allowance.

Dependent Claims 9 and 13-14 are dependent on allowable Independent Claim 8, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 9 and 13-14 are patentable over Fujita for the reasons discussed above.

INDEPENDENT CLAIM 15

With respect to Independent Claim 15, it is respectfully submitted that Independent Claim 15 recites similar limitations as in Independent Claim 1. Therefore, Independent Claim 15 is allowable over Fujita for reasons discussed in connection with Independent Claim 1.

Dependent Claims 21-23 are dependent on allowable Independent Claim 15, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 21-23 are patentable over Fujita for the reasons discussed above.

INDEPENDENT CLAIM 24

With respect to Independent Claim 24, it is respectfully submitted that Independent Claim 24 recites similar limitations as in Independent Claim 1. Therefore, Independent Claim 24 is allowable over Fujita for reasons discussed in connection with Independent Claim 1.

Dependent Claims 25-26 and 32-34 are dependent on allowable Independent Claim 24, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 25-26 and 32-34 are patentable over Fujita for the reasons discussed above.

INDEPENDENT CLAIM 35

With respect to Independent Claim 35, it is respectfully submitted that Independent Claim 35 recites similar limitations as in Independent Claim 1.

Therefore, Independent Claim 35 is allowable over Fujita for reasons discussed in connection with Independent Claim 1.

Dependent Claims 36 and 42-44 are dependent on allowable Independent Claim 35, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 36 and 42-44 are patentable over Fujita for the reasons discussed above.

35 U.S.C. Section 103(a) Rejections

Claims 2-4, 16-19, 27-30, and 37-40 stand rejected under 35 U.S.C. Section 103(a) as being unpatentable over Fujita, U.S. Patent No. 5,948,070 (hereafter Fujita). This rejection is respectfully traversed.

Dependent Claims 2-4 are dependent on allowable Independent Claim 1, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 2-4 are patentable over Fujita for the reasons discussed above.

Dependent Claims 16-19 are dependent on allowable Independent Claim 15, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 16-19 are patentable over Fujita for the reasons discussed above.

Dependent Claims 27-30 are dependent on allowable Independent Claim 24, which is allowable over Fujita. Hence, it is respectfully submitted that

Dependent Claims 27-30 are patentable over Fujita for the reasons discussed above.

Dependent Claims 37-40 are dependent on allowable Independent Claim 35, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 37-40 are patentable over Fujita for the reasons discussed above.

Claims 5, 10-12, 20, 31 and 41 stand rejected under 35 U.S.C. Section 103(a) as being unpatentable over Fujita, U.S. Patent No. 5,948,070 (hereafter Fujita) in view of Nederlof, U.S. Patent No. 5,590,118 (hereafter Nederlof). This rejection is respectfully traversed.

Dependent Claim 5 is dependent on allowable Independent Claim 1, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claim 5 is patentable over Fujita for the reasons discussed above. Moreover, Nederlof does not disclose communicating streams of digital broadcast information to devices and rendering pseudo simultaneously, the broadcast information, as recited in Independent Claim 1. Thus, it is respectfully submitted that Dependent Claim 5 is patentable over Nederlof for the reasons discussed above.

Dependent Claims 10-12 is dependent on allowable Independent Claim 1, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claims 10-12 are patentable over Fujita for the reasons discussed

above. Moreover, Nederlof does not disclose achieving pseudo-simultaneous broadcasting of broadcast information, as recited in Independent Claim 8.

Thus, it is respectfully submitted that Dependent Claims 10-12 are patentable over Nederlof for the reasons discussed above.

Dependent Claim 20 is dependent on allowable Independent Claim 15, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claim 20 is patentable over Fujita for the reasons discussed above. Moreover, Nederlof does not disclose communicating streams of digital broadcast information to devices and rendering pseudo simultaneously, the broadcast information, as recited in Independent Claim 15. Thus, it is respectfully submitted that Dependent Claim 20 is patentable over Nederlof for the reasons discussed above.

Dependent Claim 31 is dependent on allowable Independent Claim 24, which is allowable over Fujita. Hence, it is respectfully submitted that Dependent Claim 21 is patentable over Fujita for the reasons discussed above. Moreover, Nederlof does not disclose communicating streams of digital broadcast information to devices and rendering pseudo simultaneously, the broadcast information, as recited in Independent Claim 24. Thus, it is respectfully submitted that Dependent Claim 31 is patentable over Nederlof for the reasons discussed above.

Dependent Claim 41 is dependent on allowable Independent Claim 35, which is allowable over Fujita. Hence, it is respectfully submitted that

Dependent Claim 41 is patentable over Fujita for the reasons discussed above. Moreover, Nederlof does not disclose communicating streams of digital broadcast information to devices and rendering pseudo simultaneously, the broadcast information, as recited in Independent Claim 35. Thus, it is respectfully submitted that Dependent Claim 41 is patentable over Nederlof for the reasons discussed above.

REFERENCE DISCLOSED IN IDS FILED 11-28-2000

The present invention recited in Claims 1-44 is distinguished from the reference Ice, U.S. Patent No. 5,884,031 (hereafter Ice), which was disclosed in the Information Disclosure Statement (IDS) filed 11-28-2000.

Ice discloses a network structure having each client device (except a top level of client devices connected to the server) connected to two additional client devices for receiving information, so that continuity is maintained if a client device goes down, and up to four client devices for disseminating information. (Ice, Col. 2, Lines 23-33).

Unlike Ice, the method and system of broadcasting information of the present invention do not impose limits on the communication connections between client devices in the network and provide a wide range of flexibility as to the structure of the network (e.g., the number of levels, the number of client devices at each level, the number of communication connections that a client device has, etc.). Moreover, the method and system of broadcasting information of the present invention respond to the case where a first client device stops

forwarding the broadcast information to a second client device by establishing a communication connection between the second client device and a third client device which forwards the broadcast information. In sum, the Claims 1-44 are patentable over Ice and are in a condition for allowance.

CONCLUSION

Applicant respectfully submits that the above remarks overcome all rejections under 35 U.S.C. Section 112, second paragraph, 35 U.S.C. Section 102(e), and 35 U.S.C. Section 103(a). For at least the above presented reasons, Applicant respectfully submits that all remaining claims (Claims 1-44) are now in condition for allowance and Applicant earnestly solicit such action from the Examiner.

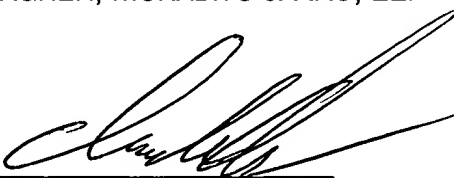
The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge any additional fees or apply any credits to our PTO deposit account number: 23-0085.

Respectfully submitted,

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